

Customer No.:31561  
Application No.: 10/604,689  
Docket No.: 10870-US-PA

### REMARKS

This is a full and timely response to the outstanding Final Office Action mailed Feb. 22, 2006. Reconsideration and allowance of the application and presently pending claims 1-17 are respectfully requested.

#### Present Status of the Application

The Office Action rejected claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Dougherty et al., US Patent 6,076,734 in view of Sayuda et al., US 6,069,636. The Office Action also rejected claim 8-17 under 35 U.S.C. 103(a) as being unpatentable over Dougherty et al., US Patent 6,076,734 in view of Sayuda et al., US Patent 6,069,636, and further in view of Weibe et al., US Patent 6,689,966.

#### Discussion of Office Action Rejections

The Office Action rejected claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Dougherty et al., US Patent 6,076,734 in view of Sayuda et al., US 6,069,636.

In response to the rejection to claims 1-7 under 35 U.S.C. 103(a) as being unpatentable over Dougherty et al., US Patent 6,076,734 in view of Sayuda et al., US 6,069,636, Applicants hereby traverse the rejection and submit that claim 1-7 are in allowable form.

With respect to claim 1, as originally filed, recites: "A pixel array for a non-touch panel input device, wherein the pixel array at least comprises a plurality of first pixel structures with

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each pixel structure at least comprising: a sub-pixel; and a first shadow pixel positioned on one side of the sub-pixel".

Applicants submit that such a pixel array as set forth in claim 1 is neither taught, disclosed, nor suggested by Dougherty '734, Sayuda '636, or any of the other cited references, taken alone or in combination.

The Examiner alleges that Dougherty discloses a non-touch panel input device (350 in FIG. 10). However, as taught by Dougherty, item 350 is "a data linked book" and "[A] primary purpose of the data linked book 350 is to link a physical book with data such as video and audio streams available via an information network such as the Internet" (Column 11, lines 20-23). Applicants submit such a data linked book 350 is not a non-touch panel input device, because there does not exist any inputting operation and any panel in accordance with the data linked book 350. First, Dougherty teaches "the linked book 350 includes a physical book 352" and "the physical book 352 appears conventional to a viewer in that the book 352 flips open to the different pages" (Column 11, lines 26-32), thus the physical book 352 is not a panel (further evidence can be found in Column 4, lines 17-19). Second, as further taught by Dougherty, that "the data linked medium includes a physical medium having at least one hot spot encoded with linking data enabling the data linked physical medium to access remote data, a sensor operable to measure and decode the linking data to a remote computer system" and "[T]he remote computer system is responsive to the linking data to retrieve the remote data and present it to a user of the data linked physical medium" (Column 4, lines 27-34), Dougherty concerns only about retrieving the remote data rather than any inputting operation (Emphasis added).

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Further, Dougherty fails to teach, suggest or disclose any pixel structure as required by claim 1. Applicants note that the Examiner contends a hot spot in FIG. 7, as reading on the pixel structure (Page 3 of the instant Final Office Action). However, Applicants respectfully disagree. A pixel should be well understood by one of ordinary skill in the art as the smallest complete sample of an image. The hot spot in FIG. 7 of Dougherty is only an encoded marker specifically relating a remote information store elsewhere. Even contended as a pixel, there is no teaching or suggestion of any pixel array in Dougherty, since there is no clue showing that the hot spot(s) are distributed in form of an array.

The Examiner admits that Dougherty '734 does not expressly disclose "the pixel array at least comprises a plurality of first pixel structures with each pixel structure at least comprising: a sub-pixel; and a first shadow pixel positioned on one side of the sub-pixel."

The Examiner alleged that "FIG. 9 of Sayuda '636 contains subpixels in the first and third line with 'shadow pixels', in line two, on one side of the subpixels". Applicants respectfully disagree with the viewpoints hold by the Examiner on the subject matter. As shown in FIG. 9 (Column 7, lines 10-17), Sayuda '636 teaches "the pixel 45 is produced in a rightmost position in a cell 46 of the dot screen when the additional information is 1, and the pixel 45 is produced at the center of the cell 46 when the additional information data is 0. Thus the additional information can be added in the images by changing the position of the pixel 45 in the cell 46 by the additional information data without changing the density of the image and without being recognized." The pixel 45 and the cell 46 are not numbered in FIG. 9, and the corresponding numbered items can be found in FIG. 18. As indicated by the Examiner, the first and the third

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line read on the sub-pixel while the second line read on the first shadow-pixel. However, Sayuda teaches "the additional information data can be added in the image by changing the position of the pixel 45 in the cell 46 by the additional information data without changing the density of the image and without being recognized" (Column 7, lines 15-18). Since the density of the image is not changed in accordance with the changing of the position of the pixels 45 in the cell 46, even without being recognized, the first line, the second line and the third line are equivalent when affect the image density, thus there is no any difference between the first line and the second line in ability of affecting image density to identify the second line as a shadow pixel while the first line is not. In another hand, Sayuda, if anything, teaches away from using any shadow means (pixels), which should be at least to some degree absorbing or sheltering light more than the first sub-pixel can. Sayuda '636 failed to teach, disclose or suggest the sub-pixel and the first shadow pixel that are required by the present pixel array as set forth in claim 1.

Still further, Applicants respectfully disagree with the motivation provided by the Examiner. The Examiner alleges the motivation for replacing the encoded image of Dougherty with the embedded data images of Sayuda is to embed a larger amount of additional information in an image. However, Dougherty and Sayuda have differet principles of operation relying on different intended purposes. Although obtaining a larger amount of information is also an object of Dougherty, Dougherty intents to retrieve the data from a remote source rather than encoding and hiding the information in the image as taught by Sayuda. Since the hot spot of Dougherty is only for representing a URL (Column 11, line 37 and 38), Dougherty does not need to encode

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that much information as Sayuda does. As such, Applicants further submit that the proposed modification render a reference (Dougherty) unsatisfactory for its intended purpose.

For at least the foregoing reasons, Applicants submit that the reference combination between Dougherty '734 and Sayuda '636 could not be deemed to render claim 1, as originally filed, obvious under 35 U.S.C. 103.

Accordingly, reconsideration and withdrawal of the rejection and allowance of independent claim 1 as originally filed over Dougherty '734 in view of Sayuda '636 are respectfully requested.

Dependent claims 2-7 incorporates all the subject matter of independent claim 1 and adds respective additional subject matter. As detailed above, it is asserted that claim 1 is allowable. Thus it is submitted that the dependent claims 2-7 are also allowable, and Applicant requests that the rejection relating thereto be withdrawn.

The Office Action rejected claim 8-17 under 35 U.S.C. 103(a) as being unpatentable over Dougherty et al., US Patent 6,076,734 in view of Sayuda et al., US Patent 6,069,636, and further in view of Weibe et al., US Patent 6,689,966.

Dependent claims 8-17 incorporates all the subject matter of independent claim 1 and adds respective additional subject matter. As detailed above, it is asserted that claim 1 is allowable. Thus it is submitted that the dependent claims 8-17 are also allowable, and Applicant requests that the rejection relating thereto be withdrawn.

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**CONCLUSION**

For at least the foregoing reasons, it is believed that the pending claims 1-17 are in proper condition for allowance and an action to such effect is earnestly solicited. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

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Respectfully submitted,

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